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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,679	12/13/2001	Kenneth L. Levy	P0505	9554
23735	7590	04/15/2005	EXAMINER	
DIGIMARC CORPORATION 9405 SW GEMINI DRIVE BEAVERTON, OR 97008			ELMORE, JOHN E	
			ART UNIT	PAPER NUMBER
			2134	

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/017,679

Applicant(s)

LEVY ET AL.

Examiner

John Elmore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-13 is/are rejected.
- 7) ☒ Claim(s) 9 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. Claims 1-14 have been examined.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claim 10 is rejected under 35 U.S.C. 112, second paragraph**, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 recites the limitation "the advertisement" in line 4. There is insufficient antecedent basis for this limitation in the claim. In the interest of compact prosecution, the limitation "related to a broadcaster of the advertisement" subsequently will be ignored.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 5-7 are rejected under 35 U.S.C. 102(b)** as being anticipated by Rhoads (US 5,822,436).

Regarding claim 5, Rhoads discloses a digital watermarking method comprising providing a plurality of digital watermark layers (multiple code words 216 in embodiment

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240), where each of the layers comprises a separate message, and embedding the plurality of digital watermark layers in content (Fig. 6 and 7; col. 21, lines 36-61).

Regarding claim 6, Rhoades teaches all the limitations of claim 5, and further teaches that the content comprises video content (col. 22, lines 10-13). Therefore, for reasons provided above, such a claim also is anticipated.

Regarding claim 7, Rhoades teaches all the limitations of claim 5, and further teaches that the content comprises audio content (e.g. audio signal via television broadcast; col. 22, lines 10-13; see also col. 15, lines 34-38, and col. 28, lines 44-46). Therefore, for reasons provided above, such a claim also is anticipated.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-4 and 10-12 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Rhoads.

Regarding claim 1, Rhoads teaches a method of tracking audio or video content comprising:

decoding a forensic identifier in a digital watermark, the forensic identifier being associated with a forensic database (identifier associated with registry database; col. 53, lines 18-26; col. 12, lines 51-53); and

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decoding a forensic identifier in a digital watermark, the forensic identifier being associated with a content user (identifier is biometric data used to authenticate the content user; col. 64, lines 17-24; col. 12, lines 51-53).

But Rhoads does not teach that these two identifiers are used in conjunction as first and second identifiers within the same watermark.

However, Rhoads also teaches the use of two identifiers within the same watermark for the purpose of supporting applications that benefit from multiple items of information associated with the content while making use of the same content data (col. 21, lines 36-55). It would be obvious to one of ordinary skill in the art at the time the invention was made to embed the two identifiers taught by Rhoads within one watermark. One would be motivated to do so in order to support an application wherein a first identifier is used to retrieve a database record associated with the content from a content server and a second identifier is used to authenticate the content user at the client device.

Regarding claim 2, Rhoads teaches all the limitations of claim 1, and also teaches that the second forensic identifier is associated with a content user through a rendering device (rendering device renders image and authenticates user; col. 64, lines 17-24). Therefore, such a claim also would have been obvious.

Regarding claim 3, Rhoads teaches all the limitations of claim 1, and also teaches that the second forensic identifier is associated with a content user through a user identifier (user identified via biometric match; col. 64, lines 17-24). Therefore, such a claim also would have been obvious.

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Regarding claim 4, Rhoads teaches all the limitations of claim 1, and also teaches communicating the first forensic identifier to a forensic database to access information related to the first forensic identifier (serial number serves as an index to a registry database to retrieve associated information; col. 53, lines 18-26). Therefore, such a claim also would have been obvious.

Regarding claim 10, Rhoads teaches a system comprising digitally watermarking a content item, the digital watermark including multiple identifiers (identifiers are serial numbers; also known generally as N-bit words – see col. 12, lines 51-53), wherein each of the identifiers is provided as a distinct digital watermark layer (col. 21, lines 36-61) and

associating a content identifier with at least some information related to the content item (e.g. ownership information; col. 53, lines 18-23).

But Rhoads does not explicitly explain that the identifiers include a distributor identifier and a broadcaster identifier.

However, Rhoads also teaches an embodiment wherein the digital watermark contains multiple identifiers indicating different organizations to which the content is provided (col. 21, line 62, through col. 22, line 7), including a mass distributor of the content (col. 33, lines 35-37), for the purpose of governing the use and distribution of the content by those organizations (col. 53, lines 18-27). One of ordinary skill in the art at the time the invention was made would recognize that a broadcaster, like a distributor, is another such organization that uses and distributes the content.

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention

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was made to provide that the identifiers in the digital watermark include a distributor identifier and a broadcaster identifier. One would be motivated to do so in order to govern the use and distribution of the content by the distributor and the broadcaster.

Regarding claim 11, Rhoads teaches all the limitations of claim 10, and also teaches communicating the content identifier to a database where the content identifier is associated with at least some information related to the content item (serial number serves as an index to a registry database to retrieve associated content information, e.g. ownership; col. 53, lines 18-26). Therefore, for reasons provided above, such a claim also would have been obvious.

Regarding claim 12, Rhoads teaches all the limitations of claim 11, and also teaches decoding the distributor identifier layer to retrieve the distributor identifier and using the distributor identifier to identify the distributor (col. 21, line 67, through col. 22, line 3; see also use of a database, col. 53, lines 18-26). Therefore, such a claim also would have been obvious. Therefore, for reasons provided above, such a claim also would have been obvious.

6. **Claims 8 and 13 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Rhoads in view of HowStuffWorks ("What is a packet?", HowStuffWorks, 2000).

Rhoades discloses a computer readable medium (e.g. MPEG motion image; col. 38, lines 40-42) including digitally watermarked content stored thereon, the digital watermark comprising message packet (N-bit word 216 is a message packet; col. 35, lines 26-49; col. 76, lines 41-47).

Although Rhoads teaches the transmission of dynamic information as a sequence of message packets comparable to sending data over a modem (col. 76, lines 47-55), Rhoades does not explicitly explain that a packet comprises a message type field, a sequence identifier field and a payload field.

However, HowStuffWorks teaches a computer readable medium wherein a packet of information comprises a message type field (header: protocol), a sequence identifier field (header: packet number) and a payload field (page 2) for the purpose of providing a more efficient transmission of information (page 1).

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Rhoads with the teaching of HowStuffWorks such that a packet comprises a message type field, a sequence identifier field and a payload field. One would be motivated to do so in order to provide a more efficient transmission of information, especially when packets may be processed by the receiver out of sequence.

Regarding claim 13, this is the same as claim 8 with the additional limitation that the payload data is encrypted. Rhoads teaches the encryption of data in a message packet (encryption of code word; col. 26, lines 36-42; col. 34, lines 11-16). Therefore, for reasons provided above, such a claim also would have been obvious.

Allowable Subject Matter

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7. **Claims 9 and 14 are objected to** as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter.

Regarding claim 9, the closest prior art, the modified device of Rhoads and HowStuffWorks as applied to claim 8, does not explain that the bit length of the message type field, sequence identifier field and payload field comprises 4, 2 and 30 bits, respectively. While the prior art provides that the length of bits assigned to each field varies by the needs of the system employing the packets, in practice this leaves a great deal of choice to the designer, as no packet format is well known in the art in this context. Therefore, it would not be obvious to one of ordinary skill in the art at the time the invention was made to select 4, 2 and 30 bits, respectively.

Regarding claim 14, the closest prior art, the modified device of Rhoads and HowStuffWorks as applied to claim 8, does not explain that the data in the sequence identifier field is randomly chosen. As the prior art teaches that the data in the sequence identifier field is determined by the sequence of the message data as encoded in the digital content data, it would not be obvious to one of ordinary skill in the art at the time the invention was made to assign random data to the sequence identifier field.

Conclusion


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Elmore whose telephone number is 571-272-4224. The examiner can normally be reached on M 10-8, T-Th 9-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Morse can be reached on 571-272-3838. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JE


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